

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 January 2004 (08.01.2004)

PCT

(10) International Publication Number
WO 2004/003466 A2

(51) International Patent Classification⁷: **G01B 7/012**

Geoffrey [GB/GB]; The Manse, 22 Church Road, Upper
Cam, Dursley, Gloucestershire GL11 5PG (GB).

(21) International Application Number:
PCT/GB2003/002810

(74) Agent: JACKSON, John, Timothy; Renishaw plc, Patent
Department, New Mills, Wotton-under-Edge, Gloucester-
shire GL12 8JR (GB).

(22) International Filing Date: 1 July 2003 (01.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0215152.0 1 July 2002 (01.07.2002) GB

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (*for all designated States except US*): REN-
ISHAW PLC [GB/GB]; New Mills, Wotton-under-Edge,
Gloucestershire GL12 8JR (GB).

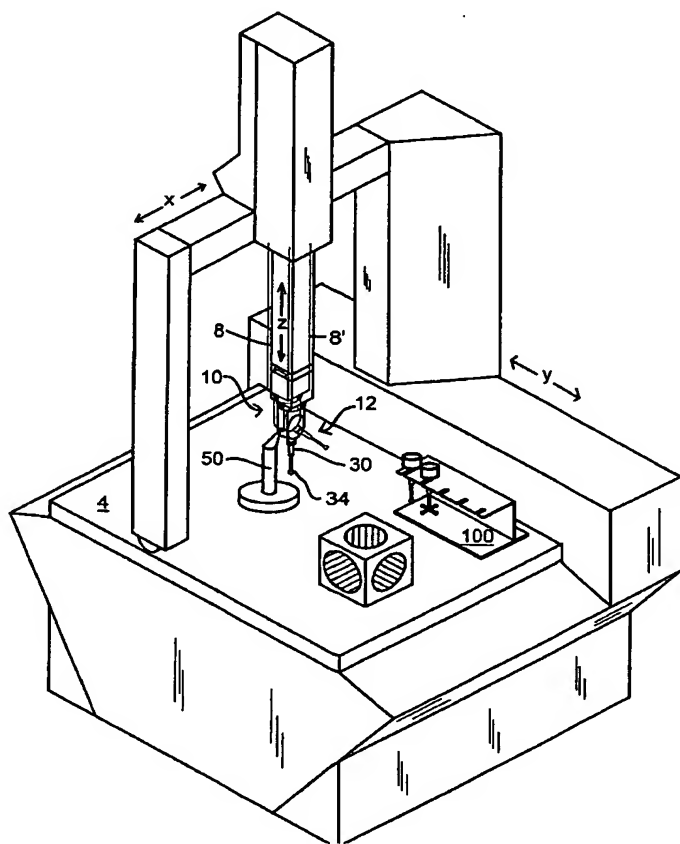
(72) Inventors; and

(75) Inventors/Applicants (*for US only*): McMURTRY,
David, Roberts [GB/GB]; Park Farm, Stancombe, Durs-
ley, Gloucestershire GL11 6AT (GB). McFARLAND,

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: PROBE OR STYLUS ORIENTATION



(57) Abstract: Re-orientation of a stylus (30) or mea-
surement probe (12) can be accomplished by engag-
ing a part of the stylus or probe with a fixed part (50)
and moving the probe in a spherical path centred at the
engagement. The engagement (50) is spaced from the
stylus tip (34) and avoids bending of the stylus during
re-orientation. The re-orientation can take place into a
plurality of e.g. repeatable rest positions by virtue of a
kinematic array (e.g. balls (122) and rollers (120) Fig
2).